The OAI-ORE Effort: Progress, Challenges, Synergies

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ABSTRACT

The panel will discuss various aspects of the ongoing Object Re-Use and Exchange (ORE) effort of the Open Archives Initiative (OAI). OAI-ORE is funded by the Andrew W. Mellon Foundation and is a result of the "Augmenting Interoperability across Scholarly Repositories" meeting that took place in April 2006 at the Mellon Foundation. A panel at JCDL 2006 reported on this meeting. The goal of OAI-ORE is to develop, identify, and profile extensible standards and protocols that allow repositories, agents, and services to interoperate in the context of use and reuse of *compound digital objects* beyond the boundaries of the holding repositories.

Categories and Subject Descriptors

H.3.7 [**Digital Libraries**]: Standards

General Terms

Management, Design, Standardization

Keywords

Digital libraries, Interoperability

1. INTRODUCTION

The international, two-year OAI-ORE effort was officially launched in October 2006. OAI-ORE is the result of the "Augmenting Interoperability across Scholarly Repositories" meeting that took place in April 2006 at the Mellon Foundation (http://msc.mellon.org/Meetings/Interop/). OAI-ORE received generous support from the Andrew W. Mellon Foundation, and is additionally supported by the National Science Foundation. Inspired by the successful approach that led to the specification of the OAI-PMH, OAI-ORE has assembled an Advisory Committee for strategic guidance, and a Technical Committee to define, scope, and analyze the problem domain, to iteratively specify and test possible solutions, and to eventually release interoperability specifications and compliant tools. In addition, via a Liaison Group a communication bridge has been established with international efforts with goals similar to those of OAI-ORE. Carl Lagoze of Cornell University, and Herbert Van de Sompel of the Los Alamos National Laboratory coordinate the effort.

The vision at the core of the OAI-ORE effort is to establish the basic interoperability fabric for a *digital scholarly communication system* composed of:

- Systems that *manage content* such as institutional repositories,

- Systems and applications that *leverage managed content* such as search engines, productivity tools, and data and text analysis services.

In order to help realize that vision, OAI-ORE aims to develop, identify, and profile extensible standards and protocols that allow *repositories, agents, and services to interoperate* in the context of *use and reuse of compound digital objects* beyond the boundaries of the holding repositories. This interoperability will establish more effective and consistent ways:

- To facilitate discovery of these objects,

- To reference (link to) these objects (and parts thereof),

- To obtain a variety of disseminations of these objects,

- To aggregate and disaggregate these objects,

- To enable processing by automated agents.

2. PANEL DISCUSSION

The panel will:

o Discuss the potential impact of OAI-ORE in the context of a scholarly communication environment that rapidly moves towards a fully digital, data driven, and collaborative mode.

o Provide insights in the evolving thinking of the OAI-ORE Technical Committee regarding problem domain, scope, use-cases, and directions for possible solutions.

o Share reflections regarding choices of Web technologies and architectural styles for the implementation of OAI-ORE goals and requirements (REST, SOA, ROA, XML over HTTP, SOAP, identification, etc.)

o Discuss relationship with goals and results from related efforts, especially the UK Common Repository Interface effort and the EC DRIVER project.

o Describe potential experimental contexts and solicit ideas for them from the audience.

o Solicit feedback from the audience on the direction of OAI-ORE and respond to questions.